



**TAU**

**TRUE AFRICA  
UNIVERSITY**

March 25, 2021 | Webinar



# What Types of New Partnerships Can Lead to African Development?

Professor Jeffrey Sachs  
Columbia University



Topics:

Sustainable development in Africa  
Climate change  
Renewable energy resources  
New transcontinental partnerships





# 1990\*



Beijing



Tianjin



Hong Kong

\* Metro lines in operation as of January 1, 1990

by peter dovak  
pdovak.com

## 1990 Metro Systems:

Beijing

Tianjin

Hong Kong



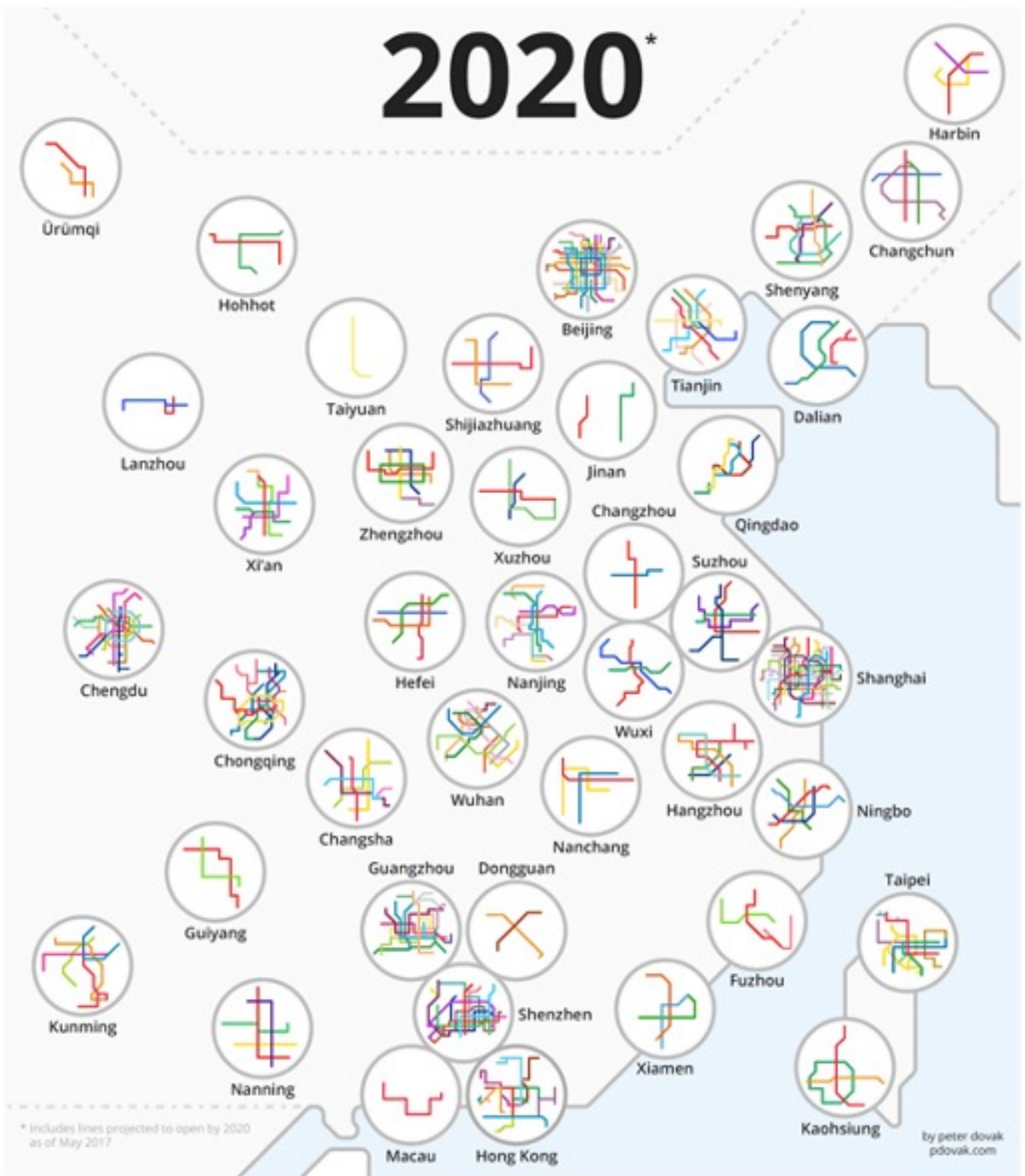
TRUE AFRICA  
UNIVERSITY



Massachusetts  
Institute of  
Technology



# 2020\*



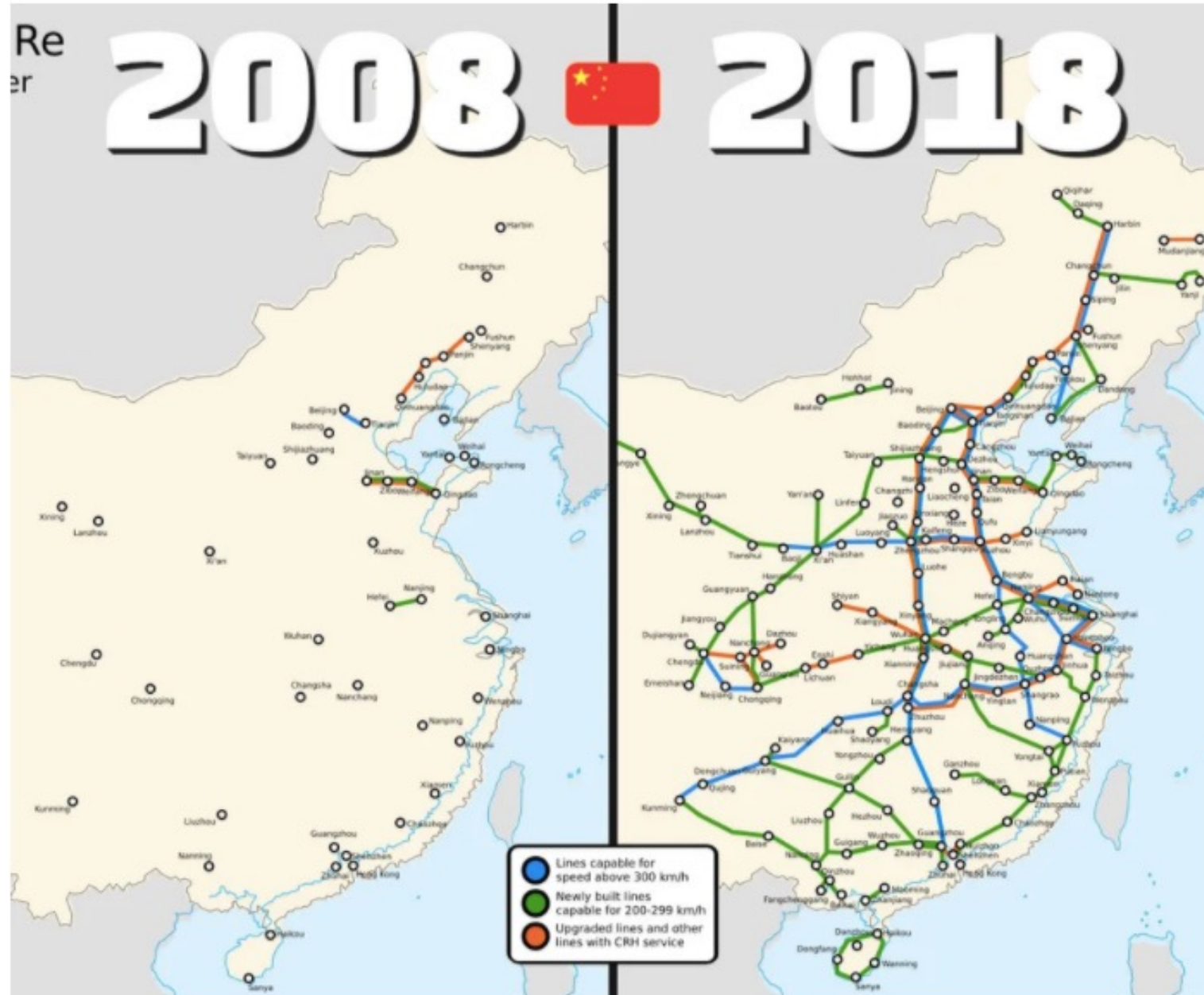
\* Includes lines projected to open by 2020 as of May 2017

by peter dovak pdovak.com





# High-Speed Railway network of the PRC comparison 2008 vs 2018





# CHINA'S TECHNOLOGY PRIORITIES IN THE 14<sup>TH</sup> FIVE-YEAR PLAN

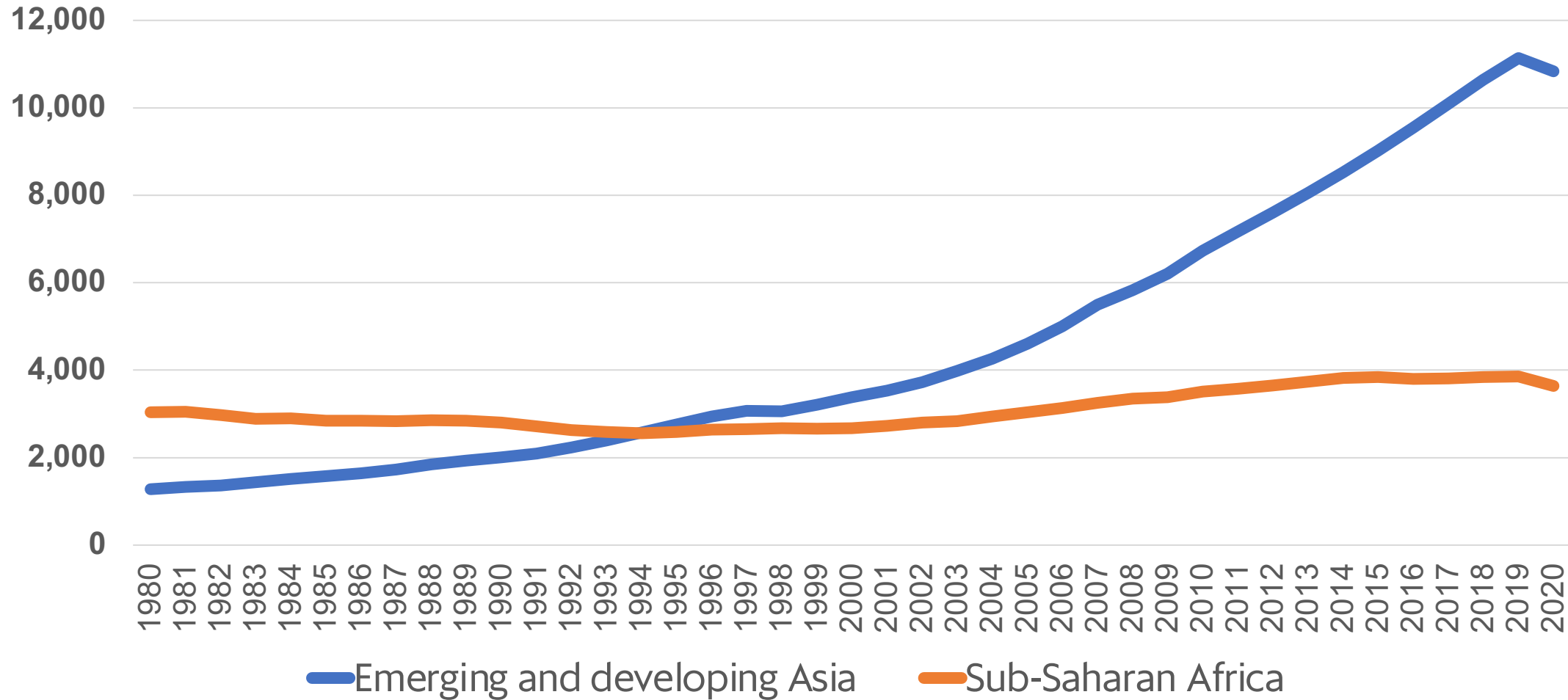


- 1) Artificial intelligence (AI)
- 2) Quantum information
- 3) Integrated circuits or semiconductors
- 4) Brain science
- 5) Genomics and biotechnology
- 6) Clinical medicine and health
- 7) Deep space, deep earth, deep sea and polar research



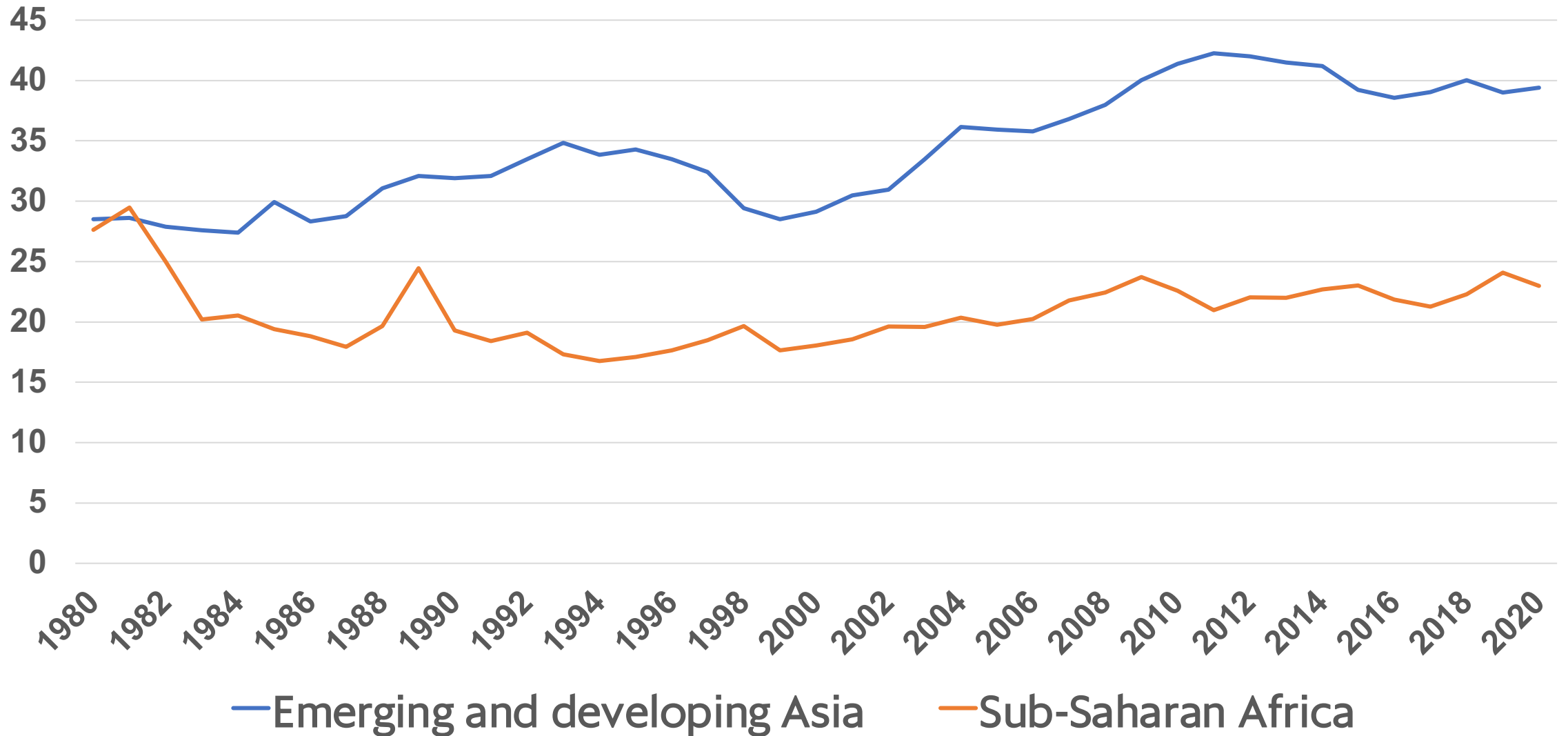
# GDP Per Capita, 1980 - 2020

## \$International Dollars (2017)



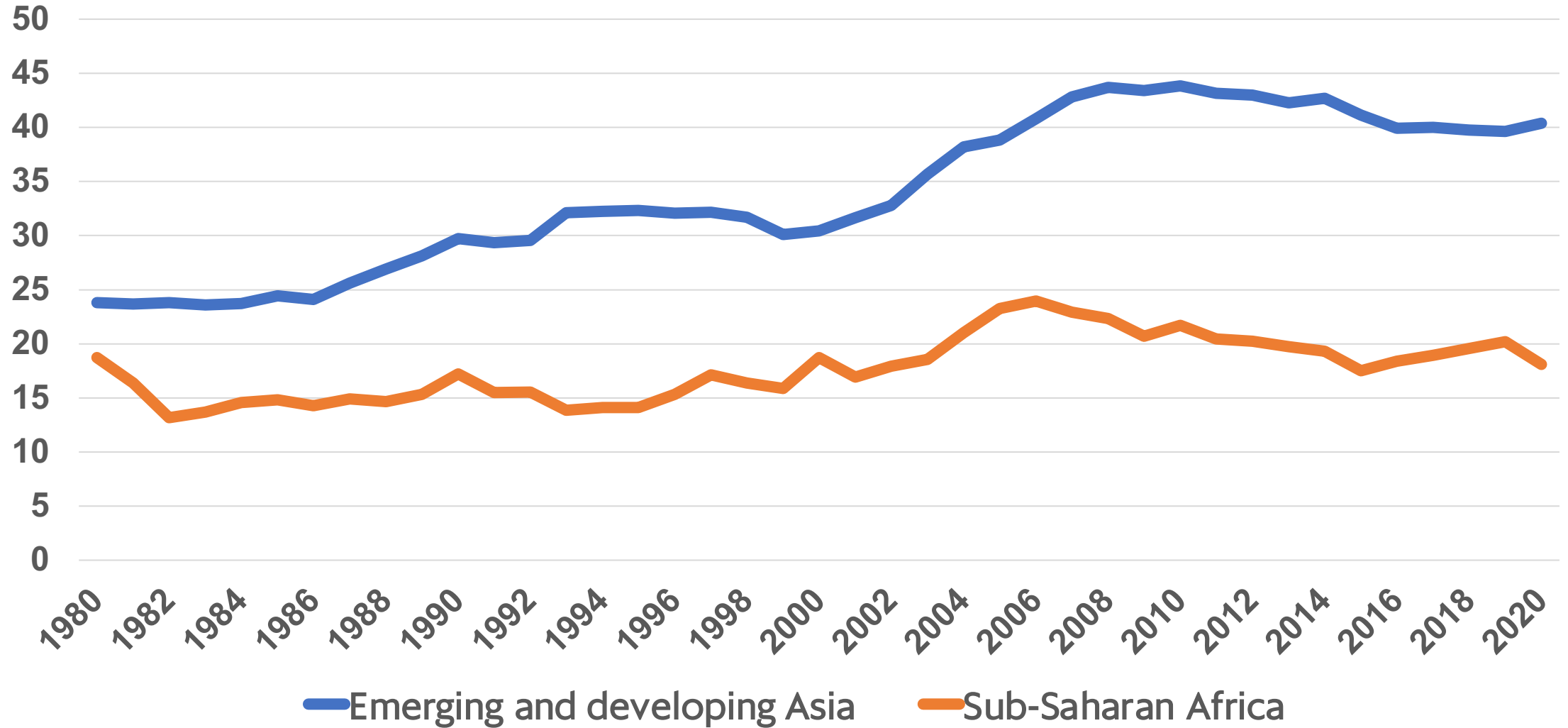


# DOMESTIC INVESTMENT RATE



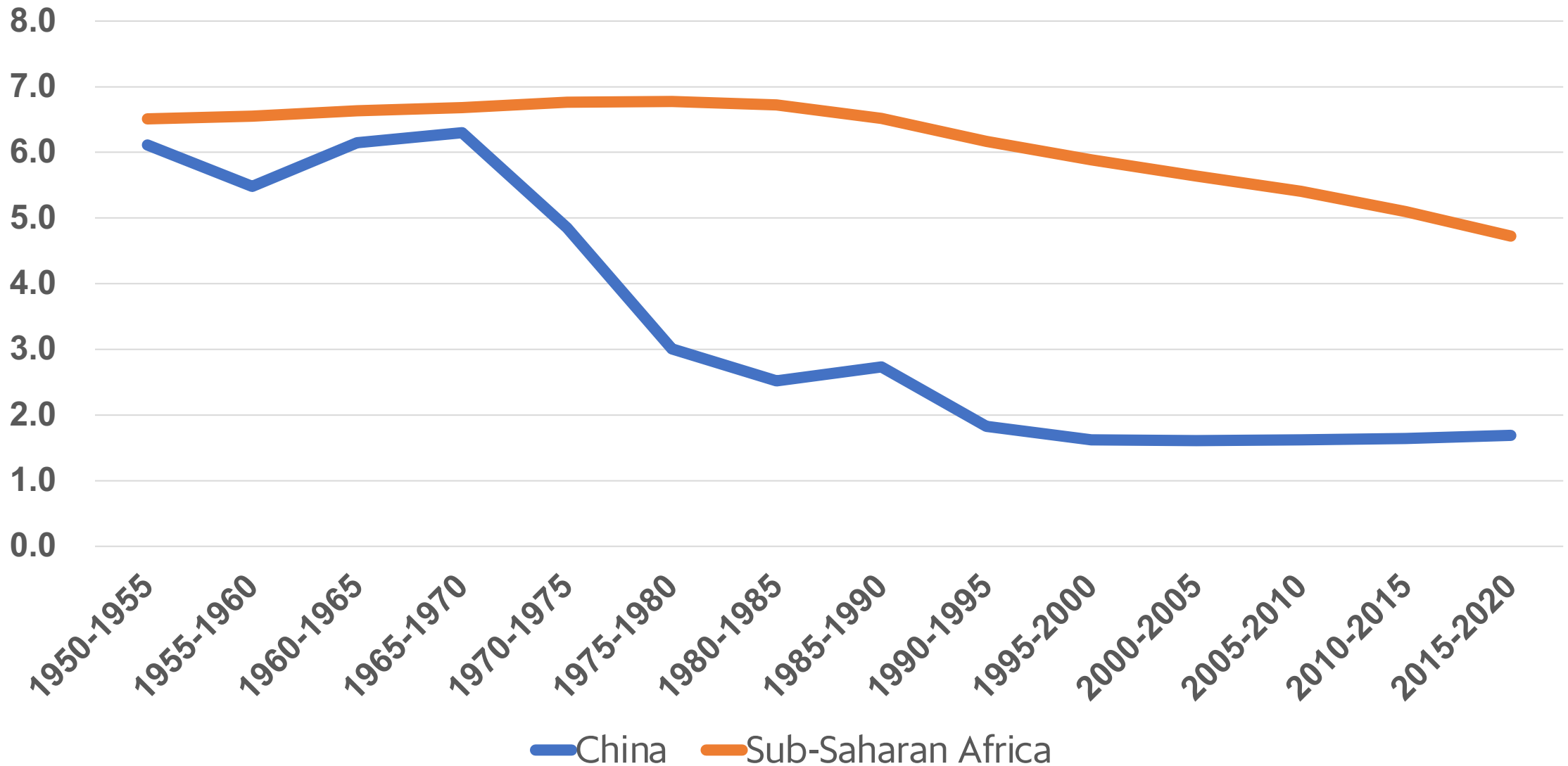


# NATIONAL SAVING RATE



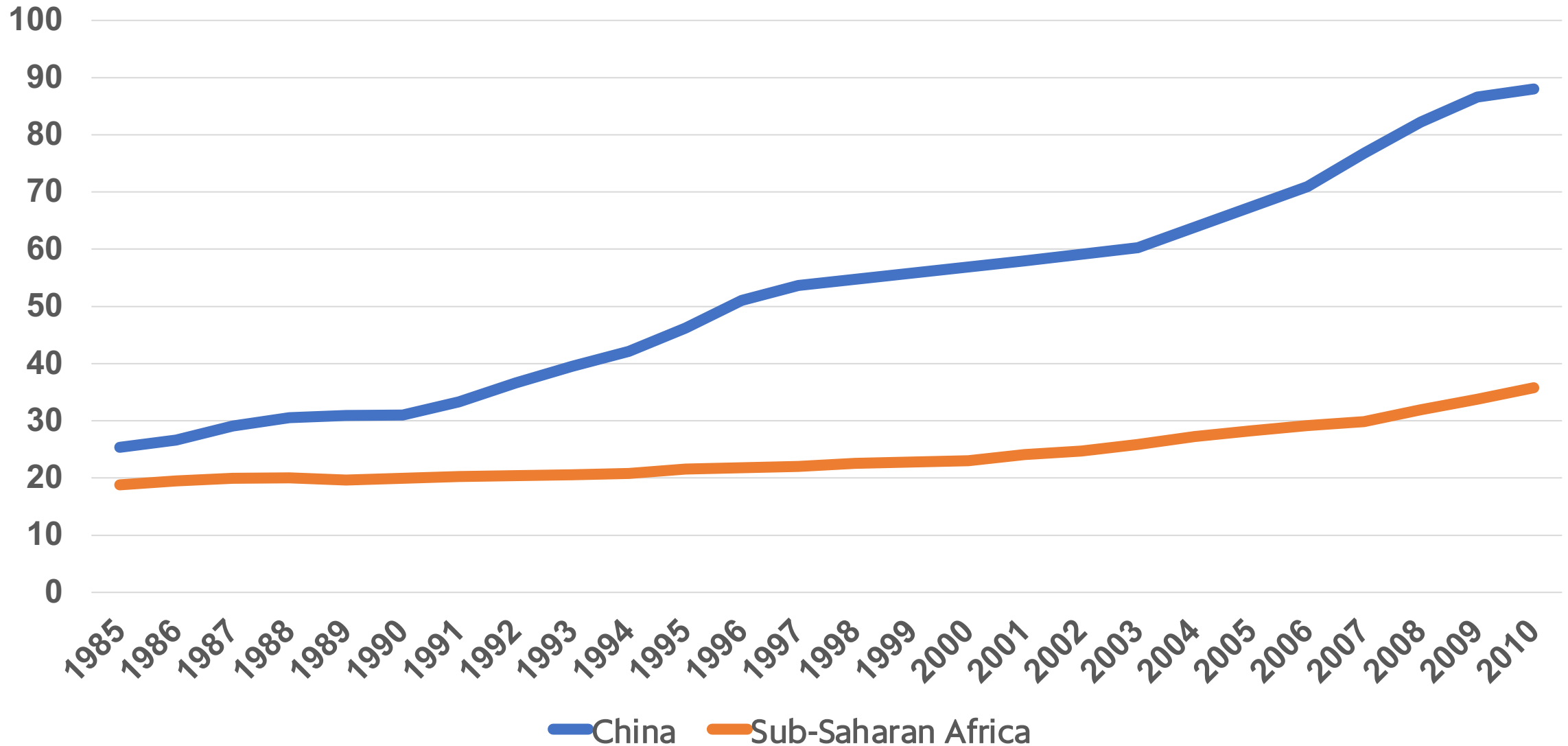


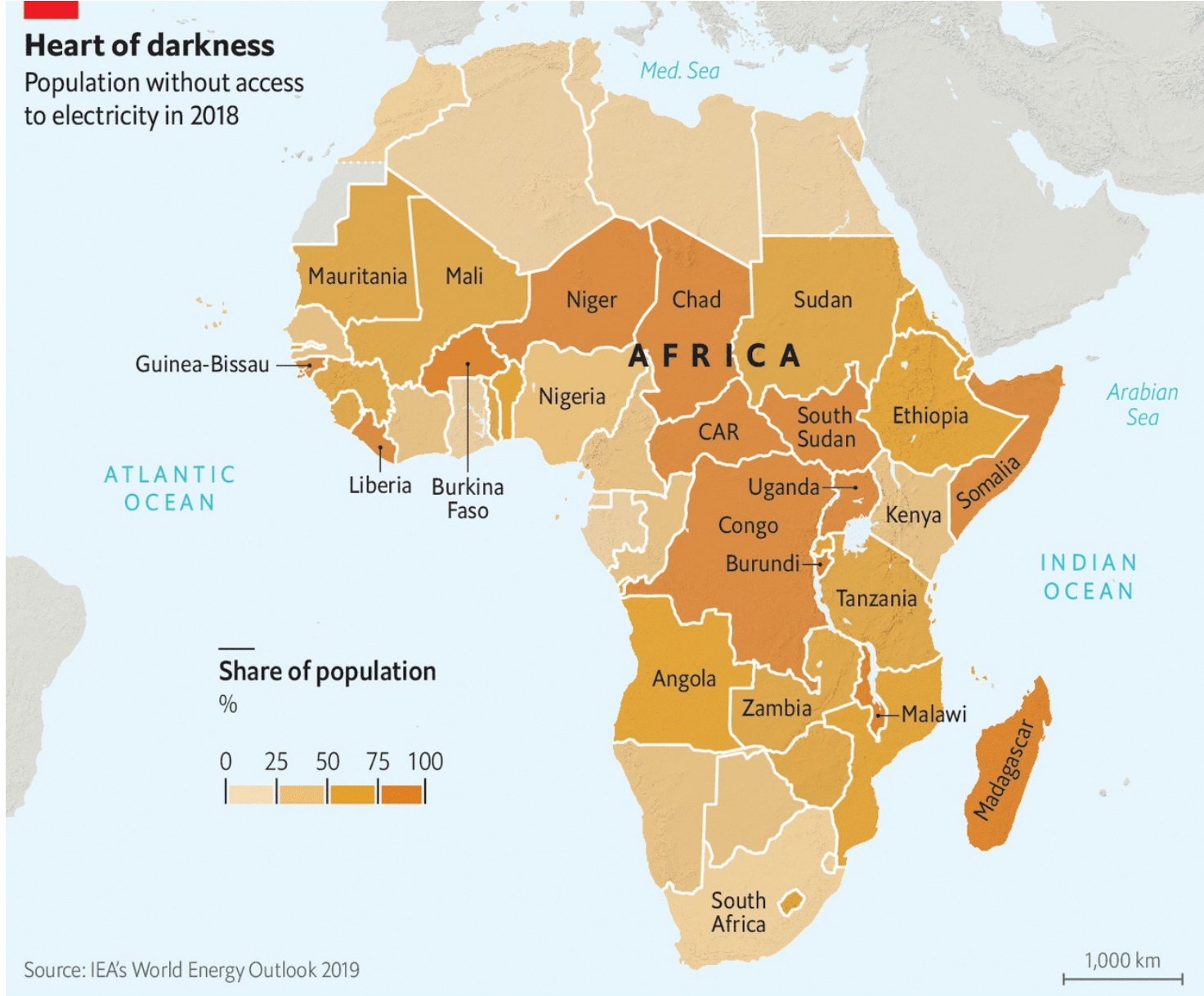
# TOTAL FERTILITY RATE





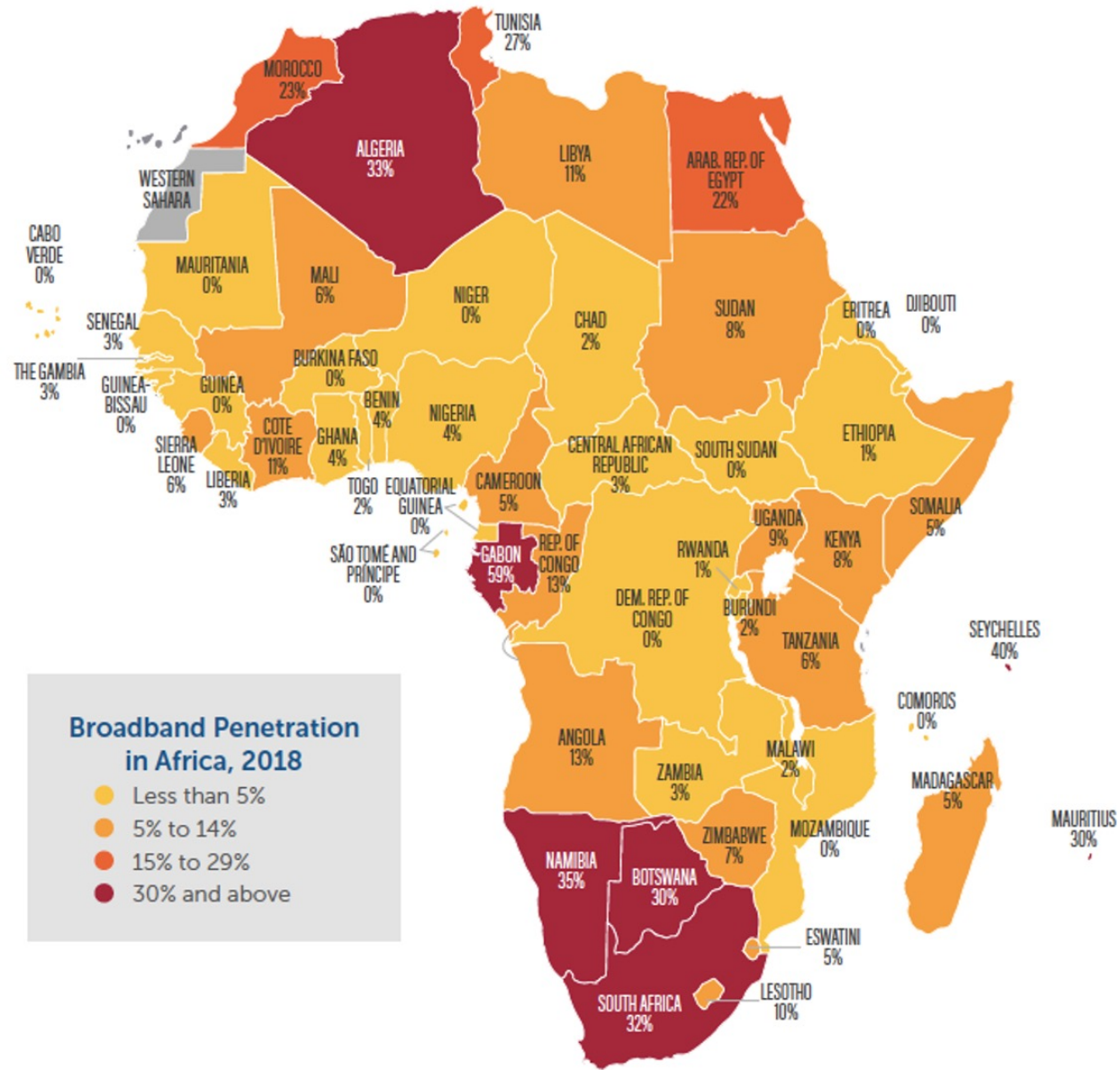
# SECONDARY ENROLMENT RATE OF GIRLS





The Economist

Figure 4.2. 4G Mobile Broadband Penetration in Africa by Country, 2018

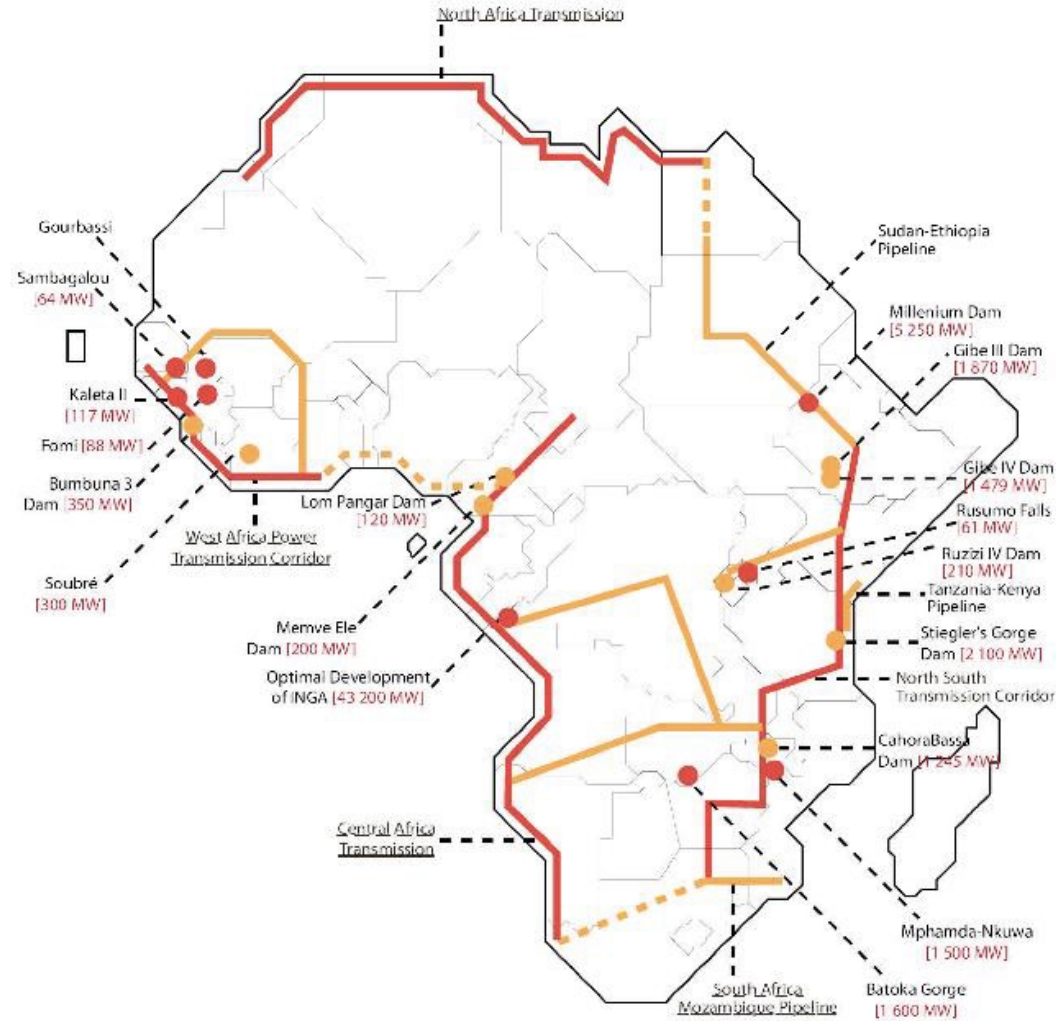






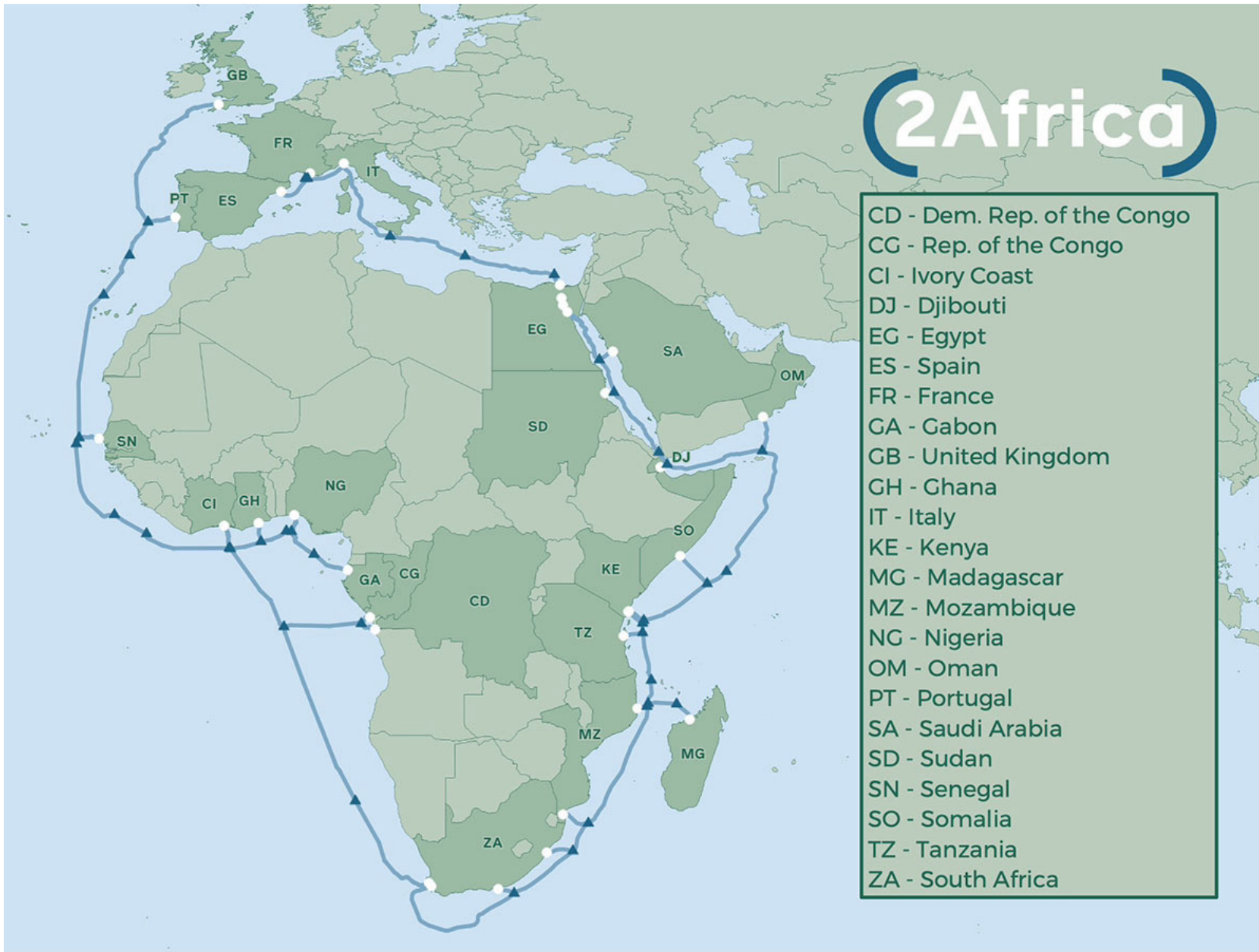
■ PIDA PAP 2020    ■ PIDA 2040

# Africa Power Grid





# 2Africa





# Priority Investments

Full electrification (mainly solar, hydro)

Full digital access (4G, 5G)

All children in school (blended)

Universal health coverage (blended)

Low-cost online higher education

Low car-ownership transport future



# Some Financing Guideposts

AU-wide strategies

Private providers with public finance and regulation

Large-scale low-interest borrowing, FDI

Major capitalization of African Development Bank

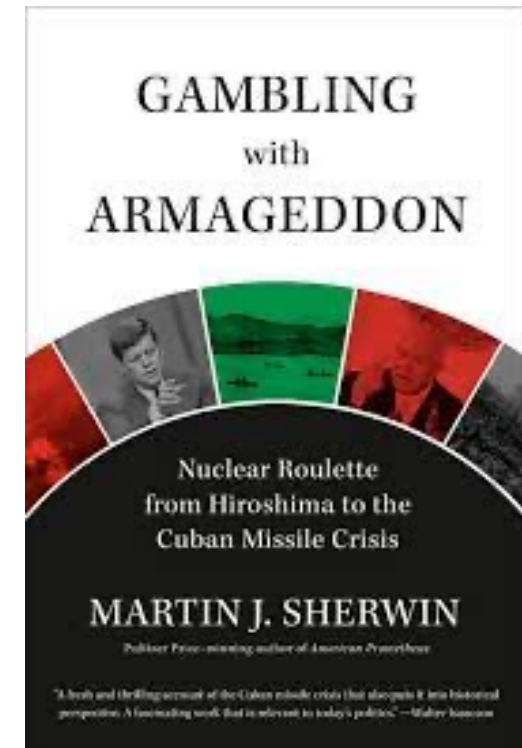
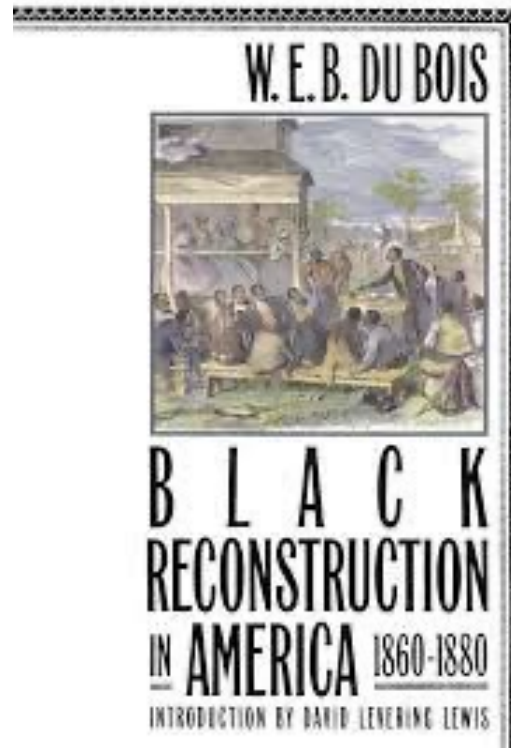
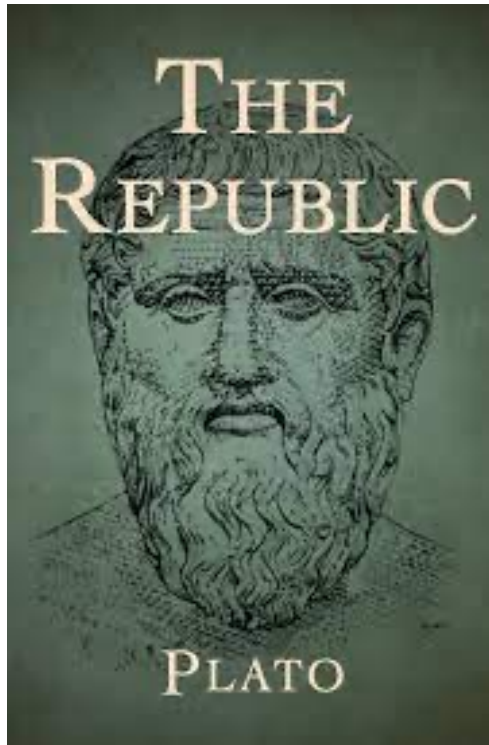
China, Japan, Korea, EU, and US mixed financing

Increasing Africa production of hardware, software





# Three Books Recommended by Jeffrey Sachs



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**Thank you!**

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